## FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Frontera Generation Limited Partnership

AUTHORIZING THE OPERATION OF Frontera Energy Center Fossil Fuel Electric Power Generation

#### LOCATED AT

Hidalgo County, Texas Latitude 26° 12' 30" Longitude 98° 23' 48" Regulated Entity Number: RN102344645

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No:	O1888	Issuance Date:	
For the Co	mmission		

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#### **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

#### **Special Terms and Conditions:**

#### Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 2 (Emissions Banking and Trading of Allowances) Requirements for an electric generating facility authorized under 30 TAC Chapter 116, Subchapter I:
  - (i) Title 30 TAC § 101.332 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.333 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.334 (relating to Allowance Deductions)
  - (iv) Title 30 TAC § 101.335 (relating to Allowance Banking and Trading)
  - (v) Title 30 TAC § 101.336 (relating to Emission Monitoring and Compliance Demonstration and Reporting)
  - (vi) Title 30 TAC § 101.338 (relating to Emission Reductions Achieved Outside the United States)
  - (vii) The terms and conditions by which the emission limits are established to meet the quantity of allowances for the electric generating facility are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
  - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(1)(E)
  - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
  - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
    - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
    - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
    - (3) Records of all observations shall be maintained.
    - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the

emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (5) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
  - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
  - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
    - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each

- calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- (3)Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3)Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eves. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
  - (4) Compliance Certification:
    - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
    - However, if visible emissions are present during the observation, (b) the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be

- accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 6. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
  - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
  - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
  - C. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
  - D. Title 40 CFR § 63.11115(a), for operation of the source
  - E. Title 40 CFR § 63.11116(a) and (a)(1) (4), for work practices

- F. Title 40 CFR § 63.11116(b), for records availability
- G. Title 40 CFR § 63.11116(d), for portable gasoline containers
- 7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

#### **Additional Monitoring Requirements**

8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

## **New Source Review Authorization Requirements**

- 9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
- 10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance

tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **Compliance Requirements**

- 12. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 13. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

## Temporary Fuel Shortages (30 TAC § 112.15)

- 14. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:
  - A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
  - B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)

- C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
- D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

#### **Permit Location**

15. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### Permit Shield (30 TAC § 122.148)

16. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## **Acid Rain Permit Requirements**

- 17. For units 1 and 2, located at the affected source identified by ORIS/Facility code 55098, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
  - A. General Requirements
    - (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
    - (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
    - (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
    - (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
    - (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

## B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained in 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO<sub>2</sub> and NO<sub>x</sub> under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

## C. SO<sub>2</sub> emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO<sub>2</sub>.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO<sub>2</sub> for the previous calendar year.
- (iii) Each ton of  $SO_2$  emitted in excess of the acid rain emissions limitations for  $SO_2$  shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO<sub>2</sub> emissions requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
  - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO<sub>2</sub> in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

#### D. NO<sub>x</sub> Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO<sub>x</sub> under 40 CFR Part 76.
- E. Excess emissions requirements for SO<sub>2</sub> and NO<sub>x</sub>.
  - (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
  - (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
    - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
    - (2) Comply with the terms of an approved offset plan.

## F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
  - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
  - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
  - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

### G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
  - (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
  - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
  - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.

- (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO<sub>2</sub> allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

#### Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements

18. For units 1 and 2 (identified in the Certificate of Representation as units 1 and 2), located at the site identified by Plant code/ORIS/Facility code 55098, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements.

#### A. General Requirements

- (i) The owners and operators of the CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall operate the source and the unit in compliance with the requirements of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program and all other applicable State and federal requirements.
- (ii) The owners and operators of the CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the requirements of 40 CFR Part 97, Subpart EEEEE for CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.
- B. Description of CSAPR Monitoring Provisions
  - (i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program.
    - (1) For unit(s) 1 and 2, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for  $NO_x$  and heat input.
    - (2) For unit(s) 1 and 2, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO<sub>x</sub>, and with the excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D for heat input.
  - (ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.830 through 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading program.

- (iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sourc es.
- (iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.
- (v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.830 through 97.834 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.835 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.
- (vi) The descriptions of monitoring applicable to the unit(s) included above meet the requirement of 40 CFR §§ 97.830 through 97.834 (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.
- 19. CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)
  - A. Designated representative requirements
    - (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.
  - B. Emissions monitoring, reporting, and recordkeeping requirements
    - (i) The owners and operators, and the designated representative, of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), § 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
    - (ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of

CSAPR NO $_{\rm x}$  Ozone Season Group 2 allowances under 40 CFR §§ 97.811 (a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO $_{\rm x}$  Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

#### C. NO<sub>x</sub> emissions requirements

- (i) CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation
  - (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824 (a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source.
  - (2) If total NO<sub>x</sub> emissions during a control period in a given year from the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at a CSAPR NO<sub>x</sub> Ozone Season Group 2 source are in excess of the CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
    - (a) The owners and operators of the source and each CSAPR  $NO_x$  Ozone Season Group 2 unit at the source shall hold the CSAPR  $NO_x$  Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824 (d); and
    - (b) The owners and operators of the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (ii) CSAPR NO<sub>x</sub> Ozone Season Group 2 assurance provisions
  - (1) If total NO<sub>x</sub> emissions during a control period in a given year from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO<sub>x</sub> emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825 (a) in an amount equal to two times the product (rounded to the nearest whole number), as determined

by the Administrator in accordance with 40 CFR § 97.825 (b), of multiplying -

- (a) The quotient of the amount by which the common designated representative's share of such NO<sub>x</sub> emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and
- (b) The amount by which total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO<sub>x</sub> emissions exceed the sum, for such control period, of the state NO<sub>x</sub> Ozone Season Group 2 trading budget under 40 CFR § 97.810 (a) and the state's variability limit under 40 CFR § 97.810 (b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO<sub>x</sub> emissions from the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (5) To the extent the owners and operators fail to hold CSAPR  $NO_x$  Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,
  - (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
  - (b) Each CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (iii) Compliance periods

- (1) A CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.
- (2) A CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.
- (iv) Vintage of allowances held for compliance
  - (1) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
  - (2) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (v) Allowance Management System requirements. Each CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (vi) Limited authorization. A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - (1) Such authorization shall only be used in accordance with the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program; and
  - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (vii) Property right. A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance does not constitute a property right.

#### D. FOP revision requirements

(i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.

(ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

## E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
  - (1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.
  - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program.
- (ii) The designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

## F. Liability

- (i) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source.
- (ii) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit or the designated

representative of a CSAPR  $NO_x$  Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

## G. Effect on other authorities

(i) No provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or CSAPR NO<sub>x</sub> Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

## Attachments

**Applicable Requirements Summary** 

**Additional Monitoring Requirements** 

**Permit Shield** 

**New Source Review Authorization References** 

## **Applicable Requirements Summary**

Unit Summary	23
Applicable Requirements Summary	24

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

## **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
COOLTWR1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
COOLTWR2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-STACK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	S1, S2	111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-TURB	STATIONARY TURBINES	1, 2	60GG-1	40 CFR Part 60, Subpart GG	No changing attributes.
PUMPENGIN1	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.

## **Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
COOLTWR1	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six-minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
COOLTWR2	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six-minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.11(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRP-STACK	EP	111-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six-minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRP-TURB	EU	60GG-1	SO <sub>2</sub>	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3) ** See Periodic Monitoring Summary	None	None
GRP-TURB	EU	60GG-1	NO <sub>x</sub>	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(c) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2)	[G]§ 60.334(b) § 60.334(c)	§ 60.334(j) § 60.334(j)(5)

## **Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 60.335(c)(1) ** See Periodic Monitoring Summary		
PUMPENGIN1	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6604(b) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(i) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(4) § 63.6640(f)(4)(i) [G]§ 63.6640(f)(4)(ii)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(a)-Table7.4 § 63.6650(f) [G]§ 63.6650(h)

1	Additional Monitorin	g Requirements	
Periodic Monitoring Summary			 27

Unit/Group/Process Information					
ID No.: COOLTWR1					
Control Device ID No.: N/A	Control Device Type: N/A				
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111				
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)				
Monitoring Information					
Indicator: Opacity					
Minimum Frequency: Quarterly					
Averaging Period: Six minutes					
Deviation Limit: Maximum opacity of 15% (based on limit in 30 TAC 111.111(a)(1)C)) except during periods defined in 30 TAC §111.111(a)(1)(E)					

Periodic Monitoring Text: Visible emissions observations shall be made and recorded at least once during each calendar quarter unless the emission unit venting to this emission point does not operate during the quarter. Records of all observations shall be maintained.

Visible emissions observations shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions shall be determined when activities described in 30 TAC §111.111(a)(1)E) are not occurring. Visible emissions shall be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from each stationary vent during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

If visible emissions are not present during the observation, the RO may certify that the source is in compliance.

However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report, as required under 30 TAC 122.145(2), or conduct the appropriate opacity test specified in 30 TAC §111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance with the applicable opacity requirements, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC 122.145(2). The opacity test must be performed by a certified opacity reader.

Unit/Group/Process Information						
ID No.: COOLTWR2						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111					
Pollutant: Opacity Main Standard: § 111.111(a)(1)(C)						
Monitoring Information						
Indicator: Opacity						
Minimum Frequency: Quarterly						
Averaging Period: Six minutes						
Deviation Limit: Maximum opacity of 15% (based on limit in 30 TAC 111.111(a)(1)C)) except during periods defined in 30 TAC §111.111(a)(1)(E)						

periods defined in 30 TAC §111.111(a)(1)(E)

Periodic Monitoring Text: Visible emissions observations shall be made and recorded at least once

Periodic Monitoring Text: Visible emissions observations shall be made and recorded at least once during each calendar quarter unless the emission unit venting to this emission point does not operate during the quarter. Records of all observations shall be maintained.

Visible emissions observations shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions shall be determined when activities described in 30 TAC §111.111(a)(1)E) are not occurring. Visible emissions shall be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from each stationary vent during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

If visible emissions are not present during the observation, the RO may certify that the source is in compliance.

However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report, as required under 30 TAC 122.145(2), or conduct the appropriate opacity test specified in 30 TAC §111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance with the applicable opacity requirements, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC 122.145(2). The opacity test must be performed by a certified opacity reader.

Unit/Group/Process Information					
ID No.: GRP-STACK					
Control Device ID No.: N/A	Control Device Type: N/A				
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-1				
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)				
Monitoring Information					
Indicator: Fuel Type					
Minimum Frequency: Annually or at any time an alternation	ate fuel is used				

Averaging Period: n/a

Deviation Limit: Failure to keep fuel records, maximum opacity = 15% if Method 9 test performed

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

Unit/Group/Process Information					
ID No.: GRP-TURB					
Control Device ID No.: N/A Control Device Type: N/A					
Applicable Regulatory Requirement					
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-1				
Pollutant: NO <sub>X</sub> Main Standard: § 60.332(a)(1)					
Monitoring Information					
Indicator: Direct NOX Emissions (CEMS)					
Minimum Frequency: continuous					
Averaging Period: hourly					
Deviation Limit: Maximum exhaust concentration of 109 ppmv at 15% O2 (per gas turbine)					
Deciadis Maniterias Taut. The continuous emissions maniterias system energical in Consist Condition					

Periodic Monitoring Text: The continuous emissions monitoring system specified in Special Condition No. 10 of NSR Permit No. 37613/PSD Permit No. PSD-TX-900 shall be used to monitor compliance with the NOx emission limit. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75.

Unit/Group/Process Information					
ID No.: GRP-TURB					
Control Device ID No.: N/A	Control Device Type: N/A				
Applicable Regulatory Requirement					
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-1				
Pollutant: SO <sub>2</sub> Main Standard: § 60.333(b)					
Monitoring Information					
Indicator: Contract documentation					
Minimum Frequency: Continuous					
Averaging Period: N/A					
Deviation Limit: Maximum total sulfur content of 20.0 grains per 100 scf of natural gas					
Periodic Monitoring Text: The permit holder shall continuously possess a current valid purchase contract, tariff sheet, or transportation contract that specifies that the maximum total sulfur content of the natural gas is 20.0 grains or less per 100 scf of gas per 40 CFR §60.334(h)(3)(i).					

	Permit Shield
Permit Shield	

## **Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
CDTK-CT1	N/A	40 CFR Part 60, Subpart Kb	This tank has less than 19,800 gallons storage capacity.
CDTK-CT2	N/A	40 CFR Part 60, Subpart Kb	This tank has less than 19,800 gallons storage capacity.
COOLTWR1	N/A	40 CFR Part 63, Subpart Q	No Chromium-based water chemicals are used in the cooling tower.
COOLTWR2	N/A	40 CFR Part 63, Subpart Q	No Chromium-based water chemicals are used in the cooling tower.
GASOLNTNK1	N/A	40 CFR Part 60, Subpart Kb	The storage tank has less than 19,800 gallons storage capacity.
GRPDIESLTK	DIESELTNK1, DIESELTNK2	40 CFR Part 60, Subpart Kb	The storage tanks have less than 19,800 gallons storage capacity.
GRPLUBETNK	LUBETNKCT1, LUBETNKCT2, LUBETNKST1, SEALTNKCT1, SEALTNKCT2	40 CFR Part 60, Subpart Kb	The units are process tanks and therefore are excluded from the definition of a storage vessel in Part 60, Subpart Kb.
GRP-TURB	1, 2	40 CFR Part 60, Subpart D	Unit is not a steam generator
GRP-TURB	1, 2	40 CFR Part 60, Subpart Da	Unit is not a steam generator
GRP-TURB	1, 2	40 CFR Part 60, Subpart Db	Unit is not a steam generator
GRP-TURB	1, 2	40 CFR Part 60, Subpart Dc	Unit is not a steam generator
GRP-TURB	1, 2	40 CFR Part 60, Subpart KKKK	The combustion turbines were constructed prior to February 18, 2005.
GRP-TURB	1, 2	40 CFR Part 60, Subpart TTTT	The turbines were constructed prior to January 8, 2014.
GRP-TURB	1, 2	40 CFR Part 63, Subpart YYYY	The site is not a major source of hazardous air pollutants.
GRP-WTTNK	WTTK1, WTTK2, WTTK3, WTTK4, WTTK5	40 CFR Part 60, Subpart Kb	The tanks have less than 19,800 gallons storage capacity
OWSEPARATR	N/A	40 CFR Part 63, Subpart VV	This standard is not referenced by any other subpart of 40 CFR

## **Permit Shield**

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			Parts 60, 61, or 63 that is applicable to the site.
PAINTING	N/A	40 CFR Part 63, Subpart MMMM	The site is not a major source of hazardous air pollutants.
PUMPENGIN1	N/A	40 CFR Part 60, Subpart IIII	The engine was manufactured before 4/1/06 and is not subject to any provisions of 60.4208 because it was installed before 12/31/08.
WASHER1	N/A	40 CFR Part 63, Subpart T	The parts washer solvent contains less than 5% hazardous air pollutants.

### **New Source Review Authorization References**

New Source Review Authorization References	. 36
New Source Review Authorization References by Emission Unit	. 37

### **New Source Review Authorization References**

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits					
PSD Permit No.: PSDTX900	Issuance Date: 09/08/2009				
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Perm By Rule, PSD Permits, or NA Permits) for the Application Area.					
Authorization No.: 37613	Issuance Date: 09/08/2009				
Permits By Rule (30 TAC Chapter 106) for the	Application Area				
Number: 106.103	Version No./Date: 03/14/1997				
Number: 106.103	Version No./Date: 09/04/2000				
Number: 106.122	Version No./Date: 03/14/1997				
Number: 106.122	Version No./Date: 09/04/2000				
Number: 106.242	Version No./Date: 03/14/1997				
Number: 106.242	Version No./Date: 09/04/2000				
Number: 106.261	Version No./Date: 11/01/2003				
Number: 106.262	Version No./Date: 11/01/2003				
Number: 106.263	Version No./Date: 11/01/2001				
Number: 106.371	Version No./Date: 03/14/1997				
Number: 106.371	Version No./Date: 09/04/2000				
Number: 106.454	Version No./Date: 11/01/2001				
Number: 106.472	Version No./Date: 03/14/1997				
Number: 106.472	Version No./Date: 09/04/2000				
Number: 106.473	Version No./Date: 03/14/1997				
Number: 106.473	Version No./Date: 09/04/2000				
Number: 106.532	Version No./Date: 03/14/1997				
Number: 106.532	Version No./Date: 09/04/2000				

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
1	UNIT 1 COMBUSTION TURBINE	37613, 106.261/11/01/2003, 106.262/11/01/2003, PSDTX900
2	UNIT 2 COMBUSTION TURBINE	37613, 106.261/11/01/2003, 106.262/11/01/2003, PSDTX900
CDTK-CT1	UNIT 1 NATURAL GAS CONDENSATE TANK	37613, PSDTX900
CDTK-CT2	UNIT 2 NATURAL GAS CONDENSATE TANK	37613, PSDTX900
COOLTWR1	COOLING TOWER 1	37613, PSDTX900
COOLTWR2	COOLING TOWER 2	37613, PSDTX900
DIESELTNK1	DIESEL FUEL STORAGE TANK FOR FIRE H2O PUMP ENGINE	106.472/09/04/2000
DIESELTNK2	DIESEL FUEL STORAGE TANK	106.472/09/04/2000
GASOLNTNK1	GASOLINE STORAGE TANK	106.473/09/04/2000
LUBETNKCT1	LUBE OIL TANK FOR UNIT 1 COMBUSTION TURBINE	37613, PSDTX900
LUBETNKCT2	LUBE OIL TANK FOR UNIT 2 COMBUSTION TURBINE	37613, PSDTX900
LUBETNKST1	LUBE OIL TANK FOR THE STEAM TURBINE	37613, PSDTX900
OWSEPARATR	OIL/WATER SEPARATOR	106.532/09/04/2000
PAINTING	MAINTENANCE PAINTING OF SITE EQUIPMENT	106.263/11/01/2001
PUMPENGIN1	FIRE WATER PUMP ENGINE	37613, PSDTX900
S1	STACK 1	37613, 106.261/11/01/2003, 106.262/11/01/2003, PSDTX900
S2	STACK 2 37613, 106.261/11/01/2003, 106.26 PSDTX900	
SEALTNKCT1	SEAL OIL RESERVOIRS FOR UNIT 1 GENERATOR	37613, PSDTX900

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
SEALTNKCT2	SEAL OIL RESERVOIRS FOR UNIT 2 GENERATOR	37613, PSDTX900
WASHER1	SOLVENT PARTS WASHER	106.454/11/01/2001
WTTK1	NALCO 3D TRASAR 3DT102 STORAGE TANK	106.371/09/04/2000
WTTK2	NALCO 3D TRASAR 3DT104 STORAGE TANK	106.371/09/04/2000
WTTK3	NALCO 356 STORAGE TANK	106.371/09/04/2000
WTTK4	NALCO ELIMIN-OX STORAGE TANK	106.371/09/04/2000
WTTK5	NALCO PERMATREAT PC-391T STORAGE TANK	106.371/09/04/2000

	Appendix A
Acronym List	40

# **Acronym List**

The following abbreviations or acronyms may be used in this permit:

	actual aubia fact per minute
	actual cubic feet per minute
	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
	continuous emissions monitoring system
	continuous opacity monitoring system
CVS	closed vent system
D/FW	
	emission point
	U.S. Environmental Protection Agency
	emission unit
	Federal Clean Air Act Amendments
	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	
	hydrogen sulfide
	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
	Million British thermal units per hournonattainment
NA	nonattainment
NA N/A	nonattainmentnot applicable
NA N/A NADB	nonattainment not applicable National Allowance Data Base
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60)
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60)
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide Texas Commission on Environmental Quality
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide Texas Commission on Environmental Quality total suspended particulate
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide Texas Commission on Environmental Quality total suspended particulate true vapor pressure
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide Texas Commission on Environmental Quality total suspended particulate
NA	nonattainment not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide Texas Commission on Environmental Quality total suspended particulate true vapor pressure

Appendix B	
Major NSR Summary Table	42
Major Nor Summary Table	

# **Major NSR Summary Table**

Permit Numb	er: 37613 and PSDTX	(900			Issuance Date: September 08, 2009		
Emission Point No. (1)	Source Name (2)	Air Contaminant	taminant		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
		Name (3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
1	Unit 1 GE Frame	NO <sub>x</sub>	106.1	430.1	5, 7, 9, 10, 11	5, 7, 9, 10, 11, 13, 14, 15, 16	7, 9, 15, 16
	FA Combustion Turbine/HRSG	СО	51.5	206.9	5, 9, 10, 11	5, 9, 10, 11, 13, 14, 15, 16	9, 15, 16
	Stack	VOC	0.6	2.4	5, 11	5, 11, 13, 14	
	(Normal Operation)	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	23.11	83.2	5, 6, 9, 11	5, 6, 9, 11, 13, 14	9
		SO <sub>2</sub>	27.06	19.57	5, 7, 9, 11, 12	5, 7, 9, 11, 12, 13, 14, 15	7, 9, 15
		H <sub>2</sub> SO <sub>4</sub>	3.31	2.4	5, 11, 12	5, 11, 21, 13, 14	
	Unit 1 GE Frame	NOx	650	71.25	5, 7, 10, 11	5, 7, 10, 11, 13, 14, 15, 18	7, 15
	7FA Combustion Turbine/ HRSG	СО	2890	223.2	5, 10, 11	5, 10, 11, 13, 14, 15, 18	15
	Stack	VOC	183	5.32	5, 11	5, 11, 13, 14, 18	
	(Startup/Shutdown/	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	21.66	5.13	5, 11	5, 11, 13, 14, 18	
	Reduced Loads Operation)	SO <sub>2</sub>	15.19	0.65	5, 7, 11, 12	5, 7, 11, 13, 14, 12, 18	7
	,	H <sub>2</sub> SO <sub>4</sub>	1.86	0.08	5, 11	5, 11, 13, 14, 18	
2	Unit 2 GE Frame	NOx	106.1	430.1	5, 7, 9, 10, 11	5, 7, 9, 10, 11, 13, 14, 15, 16	7, 9, 15, 16
	7FA Combustion Turbine/HRSG	СО	51.5	206.9	5, 9, 10, 11	5, 9, 10, 11, 13, 14, 15, 16	9, 15, 16
	Stack	VOC	0.6	2.4	5, 11	5, 11, 13, 14	
	(Normal Operation)	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	23.11	83.2	5, 6, 9, 11	5, 6, 9, 11, 13, 14	9
		SO <sub>2</sub>	27.06	19.57	5, 7, 9, 11, 12	5, 7, 9, 11, 12, 13, 14, 15	7, 9, 15
		H <sub>2</sub> SO <sub>4</sub>	3.31	2.4	5, 11, 12	5, 11, 21, 13, 14	
	Unit 2 GE Frame	NOx	650	71.25	5, 7, 10, 11	5, 7, 10, 11, 13, 14, 15, 18	7, 15
	7FA Combustion	СО	2890	223.2	5, 10, 11	5, 10, 11, 13, 14, 15, 18	15

Permit Number	Permit Number: 37613 and PSDTX900 Issuance Date: September 08, 2009							
Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission	n Rates * Monitoring and Testing Recordkeeping Requirements Requirements			Reporting Requirements	
		Name (3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.	
	Turbine/HRSG	VOC	183	5.32	5, 11	5, 11, 13, 14, 18		
	Stack	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	21.66	5.13	5, 11	5, 11, 13, 14, 18		
	(Start-up/Shutdown/ Reduced Loads	SO <sub>2</sub>	15.19	0.65	5, 7, 11, 12	5, 7, 11, 13, 14, 12, 18	7	
	Operation)	H <sub>2</sub> SO <sub>4</sub>	1.86	0.08	5, 11	5, 11, 13, 14, 18		
3	Natural Gas Piping	VOC	0.10	0.46	5	5, 13		
	Fugitives for Units 1 & 2 (5)	H <sub>2</sub> S	0.02	0.01	5, 12	5, 12, 13, 14		
4	Cooling Tower	PM/PM <sub>10</sub>	2.04	8.94	-	-	-	
		HOCI	0.04	0.19	-	-	-	
		HCI	0.03	0.13	-	-	-	
		H <sub>2</sub> SO <sub>4</sub>	<0.01	<0.01	-	-	-	
		H <sub>3</sub> PO <sub>4</sub>	<0.01	<0.01	-	-	-	
		C <sub>6</sub> H <sub>4</sub> N <sub>3</sub> Na	<0.01	<0.01	-	-	-	
CTG1-OV	Unit 1 Combustion	VOC	0.09	0.4	-	-	-	
	Turbine Lube Oil Tank, Unloading, and Piping	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.09	0.4	-	-	-	
CTG2-OV	Unit 2 Combustion	VOC	0.09	0.4	-	-	-	
	Turbine Lube Oil Vent, Unloading, and Piping	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.09	0.4	-	-	-	
STG1-OV	Steam Turbine Lube	VOC	0.09	0.4	-	-	-	
	Oil Vent, Unloading, and Piping	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.09	0.4	-	-	-	
PUMP-DSL	Diesel Pump Engine	NOx	7.75	3.39	-	-	-	
	Stack and Engine	СО	1.67	0.73	-	-	-	

Permit Number: 37613 and PSDTX900 Issuance Date: September 08, 2009							
Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
		Name (3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Lube Oil Crankcase	VOC	0.63	0.32	-	-	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.56	0.25	-	-	-
		SO <sub>2</sub>	1.01	0.44	-	-	-
		H <sub>2</sub> SO <sub>4</sub>	0.15	0.07	-	-	-
CDTK-CT1	Unit 1 Natural Gas	VOC	<0.01	0.02	-	-	-
	Condensate Tank	H <sub>2</sub> S	<0.01	<0.01	-	-	-
CDTK-CT2	Unit 2 Natural Gas	VOC	<0.01	0.02	-	-	-
	Condensate Tank	H <sub>2</sub> S	<0.01	<0.01	-	-	-
SCVENT1	Hydrogen Scavenging Vent	voc	<0.01	<0.01	-	-	-
SCVENT2	Hydrogen Scavenging Vent	VOC	<0.01	<0.01	-	-	-

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>

PM<sub>10</sub> - particulate matter, suspended in the atmosphere, equal to or less than 10 microns in diameter PM<sub>2.5</sub> - particulate matter, suspended in the atmosphere, equal to or less than 2.5 microns in diameter

CO - carbon monoxide

H<sub>2</sub>SO<sub>4</sub>- sulfuric acid

HOCI - hypochlorous acid
HCI - hydrochloric acid
H2S - hydrogen sulfide
H3PO4 - phosphoric acid
C6H4N3Na - benzotriazole

- (4) The PM includes condensibles (both front half and back half of the sample train).
- (5) Fugitive emissions are an estimate only, and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:
  - 24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year.
- \*\* Compliance with annual emission limits is based on a rolling 12-month period.



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO
Frontera Generation Limited Partnership
AUTHORIZING THE CONTINUED OPERATION OF
Electric Power Generation Plant
LOCATED AT Mission, Hidalgo County, Texas
LATITUDE 26° 12′ 30″ LONGITUDE 98° 23′ 48″

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
- 2. Voiding of Permit. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property, and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
- 3. Construction Progress. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
- 10. Compliance with Rules. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. This permit may be appealed pursuant to 30 TAC § 50.139.
- 12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 14. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMITS 37613 and PSDTX900

Date: September 8, 2009

For the Commission

MadVilley

#### SPECIAL CONDITIONS

### Permit Numbers 37613 and PSDTX900

### EMISSION LIMITATIONS AND OPERATING SPECIFICATIONS

- 1. The gas turbines shall be limited to firing pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet. Firing of any other fuel will require authorization from the permitting authority. The Firewater Pump Engine (EPN PUMP-DSL) is authorized to fire diesel fuel containing no more than 0.5 weight percent sulfur and are limited to a maximum of 876 hours of operation annually. (09/09)
- 2. Except during the periods of start-up, shutdown, or other operating conditions as described in Special Condition 3, the average hourly concentration in parts per million by volume, dry (ppmvd) corrected to 15 percent oxygen (O<sub>2</sub>) (ppmvd at 15 percent O<sub>2</sub>) in the combustion turbine stack gases shall not exceed 15 ppmvd for nitrogen oxides (NO<sub>x</sub>) and 15 ppmvd for carbon monoxide (CO). Duration of each start-up and shutdown event shall not exceed three hours. (09/09)
- 3. Except during the periods of start-up and shutdown, each combustion turbine shall be limited to an operating range from 40 percent of base load to 100 percent of peak load (for ambient conditions that exist at the time of turbine operation) and the NO<sub>x</sub> and CO concentrations of Special Condition No. 2 and the opacity limitation of Special Condition No. 6 shall apply. The above limits shall not apply when a combustion turbine is operated at less than 40 percent of base load due to mechanical constraints (including the required longer heating period for a heat recovery steam generator after an outrage) or transmission system constraints on the electric grid. These periods shall not exceed eight hours per event. (09/09)
- 4. Each turbine shall be limited to a maximum firing rate of no more than 1,866 MMBtu/hour fuel higher heating value.
- 5. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in this facility or shall allow air pollution control agency representatives to obtain a sample for analysis.
- 6. Opacity of emissions shall not exceed 5 percent averaged over a six-minute period from each emission point (Emission Point Nos. [EPNs] 1 and 2), except for those periods described in Title 30 Texas Administrative Code § 111.111(a)(1)(E) or in Special Condition No. 3. The permit holder shall conduct a quarterly visible emissions observation of each operating natural gas fired facility following the procedures of EPA Reference Method 22 in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Appendix A.

#### SPECIAL CONDITIONS

Permit Numbers 37613 and PSDTX900

Page 2

If visible emissions are present, opacity shall be determined by EPA Reference Method 9 in 40 CFR Part 60 Appendix A. Records shall be kept of any EPA Reference Method 9 and 22 evaluations. (09/09)

### FEDERAL APPLICABILITY

- 7. These combustion turbines shall comply with applicable requirements of the following EPA regulations in 40 CFR Part 60 on Standards of Performance for New Stationary Sources, promulgated for: (09/09)
  - A. Subpart A, General Conditions; and
  - B. Subpart GG, Standards of Performance for Stationary Gas Turbines.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

### INITIAL DETERMINATION OF COMPLIANCE

- 8. Sampling ports and platforms shall be incorporated into the design of each HRSG exhaust stack according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
- 9. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the two gas-fired turbines. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ <u>Sampling Procedures Manual</u> and in accordance with the appropriate EPA Reference Methods 201A and 202 or Reference Method 5, modified to include back-half condensibles, for the concentration of particulate matter less than 10 microns in diameter (PM<sub>10</sub>); Reference Method 8 for sulfur dioxide (SO<sub>2</sub>); Reference Method 9 for opacity (consisting of 30 six-minute readings as provided in 40 CFR § 60.11[b]); Reference Method 10 for the concentration of CO; and Reference Method 20 for the concentrations of NO<sub>x</sub> and O<sub>2</sub> or equivalent methods.

Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for SO<sub>2</sub>. If fuel sampling is used, compliance with New Source Performance Standards (NSPS), Subpart GG, SO<sub>2</sub> limits shall be based on 100 percent

conversion of the sulfur in the fuel to SO<sub>2</sub>. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling. The TCEQ Executive Director or designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

A. The TCEQ Harlingen Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, the TCEQ, or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Permitting and Registration, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Air Permits Division in Austin. (09/09)

B. Air contaminants emitted from each gas turbine unit to be tested for include (but are not limited to) NO<sub>x</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, O<sub>2</sub>, and opacity. Each gas turbine shall be tested for NO<sub>x</sub>, CO, and O<sub>2</sub> at a minimum of four points in the normal operating range, including the minimum point in the range and base load for the atmospheric conditions which exist during testing. Normal operating range is 40 percent to 100 percent of peak load. Each turbine shall be tested for SO<sub>2</sub>, PM<sub>10</sub>, and opacity only at base load. (09/09)

- C. Sampling of each turbine unit shall occur within 60 days after achieving the maximum production rate at which each turbine will be operated but no later than 180 days after its initial start-up. The TCEQ and the EPA may require additional sampling at other times as they deem appropriate.
- D. Within 60 days after the completion of the testing and sampling required for each turbine unit herein, copies of the sampling report shall be distributed as follows:

One copy to the TCEQ Harlingen Regional Office

One copy to the TCEQ Office of Permitting and Registration, Air Permits Division, Austin

One copy to the EPA Region 6 in Dallas

The testing for the initial determination of compliance was completed on July 16, 1999. This requirement is thereby considered fulfilled. (09/09)

### CONTINUOUS DETERMINATION OF COMPLIANCE

- 10. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to:
  - A. Measure and record the concentrations of NO<sub>x</sub>, CO, and diluent gas (O<sub>2</sub> or carbon dioxide) at each heat recovery steam generator exhaust stack. The NO<sub>x</sub> and CO concentrations shall be corrected and reported in accordance with Special Condition No. 2.
  - B. The CEMS required in Special Condition No. 10A shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75 for the NO<sub>x</sub> CEMS and Part 60 for CO CEMS. Additionally, the holder of this permit shall report CEMS downtime to the TCEQ Regional Director as required by Special Condition No. 15. (09/09)
  - C. The monitoring data shall be reduced to hourly average concentrations at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.

- D. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. The exhaust emissions from EPNs 1 and 2 shall be calculated on an hourly basis in pounds per hour using the measured or calculated flow rate and the concentrations of NO<sub>x</sub> and CO from the CEMS required in Special Condition No. 10.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required relative accuracy test audits in order to provide them the opportunity to observe the testing.
- 11. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly fuel consumption in the gas turbines. The systems shall be accurate to ±5.0 percent, and the system shall be approved by the TCEQ Regional Director prior to conducting the initial compliance demonstration required by Special Condition No. 9.
- 12. The holder of this permit shall semi-annually monitor the fuels fired in the equipment authorized by this permit for fuel-bound sulfur as specified in 40 CFR § 60.334(h). Any request for a change in the current custom monitoring schedule shall be made in writing and directed to the Executive Director of the TCEQ, although, authority for granting such custom schedules remains with the EPA. Any custom schedule approved by EPA pursuant to 40 CFR § 60.334(h) will be recognized as enforceable conditions of this permit provided that the holder of this permit demonstrates that the conditions of such custom schedule will be adequate to demonstrate continuous compliance with the attached maximum allowable emission rates table (MAERT) and with Special Condition No. 1. (09/09)

### RECORDKEEPING REQUIREMENTS

- 13. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, the EPA, or any air pollution control agency with jurisdiction.
  - A. A copy of this permit.
  - B. Permit application dated February 1998.
  - C. A complete copy of the testing report and records of the initial performance testing completed pursuant to Special Condition No. 9 to demonstrate initial compliance.

- D. Stack sampling results or other testing that may be conducted on units authorized under this permit after the date of issuance of this permit.
- E. A start-up and shutdown plan required by Special Condition No. 18. (09/09)
- 14. The following information shall be made and maintained by the holder of this permit in a form suitable for inspection for a period of two years after the data is obtained and shall be made immediately available upon request to representatives of the TCEQ, the EPA, or any local air pollution control program having jurisdiction:
  - A. Records of the hours of operation and daily quantity of natural gas fired in the turbines to demonstrate compliance with Special Condition No. 4.
  - B. A copy of the contractual fuel quality analysis agreement with the natural gas supplier shall be kept to demonstrate compliance with total sulfur limitations of Special Condition No. 1. If the natural gas supplier changes, the new contractual agreement must be kept.
  - C. Records of fuel sampling conducted pursuant to Special Condition No. 12.
  - D. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems of devices in a permanent form suitable for inspection.
  - E. Records of the CEMS data required by Special Condition No. 10D.
  - F. Records of reporting pursuant to Special Condition Nos. 15, 16, and 17.
  - G. Records of hourly fuel consumption pursuant to Special Condition No. 11.
  - H. Records of monthly visible emission observations and opacity observations pursuant to Special Condition No. 6.

### **REPORTING**

15. The holder of this permit shall submit to the TCEQ Harlingen Regional Office a quarterly report pursuant to 40 CFR Part 75. In addition, each quarterly report submitted to the TCEQ shall contain the hours of operation of the facility and a report summary of the periods of noncomplying emissions and CEMS down times by cause. The CEMS

- downtimes that exceed 72 hours shall be reported to the TCEQ Harlingen Regional Office either verbally or in writing no later than 24 hours after the 72-hour period ends. (09/09)
- 16. If the average NO<sub>x</sub> or CO stack outlet concentration exceeds permitted concentrations identified in Special Condition No. 2 for more than one hour, the holder of this permit shall investigate and determine the reason for the exceedance; and, if needed, make necessary repairs and/or adjustments as soon as possible.

If the  $NO_x$  or CO concentrations exceed the concentrations required by Special Condition No. 2 for more than 24 hours, the permit holder shall notify the TCEQ Regional Office, either verbally or with a written report, detailing the cause of the increase in emissions and all efforts being made to correct the problem.

### PERMIT-BY-RULE INCORPORATION

17. The following emission sources and activities are authorized by permit by rule and are incorporated into this permit by reference. (09/09)

Emission Sources and Activities	PBR Authorization
Gas turbine lube oil reservoirs recirculation systems, and piping	§106.261
Hydrogen scavenging from seal oil for gas turbine generators	§106.261
Miscellaneous water treatment chemical emissions from the cooling tower	§106.262
Hydrogen sulfide emissions from natural gas piping	§106.262
Natural gas condensate collection/storage containers and piping	§106.473
Firewater pump engine and associated lube oil crankcase, piping, and loading/unloading	§106.511
Miscellaneous welding and soldering	§106.227
Miscellaneous maintenance activities (painting, blastcleaning, etc.)	§106.263
Miscellaneous machining, drilling, cutting, sawing, grinding, gluing, and other hand-held equipment operations	§106.265
Treatment systems, including chemical handling and storage operations, for cooling tower water, evaporative cooler water, and boiler feedwater	§106.371
Diesel storage tank, piping, and dispensing operations supporting plant vehicles	§106.412
Gasoline storage tank, piping, and dispensing operations supporting plant vehicles	§106.412

Emission Sources and Activities	PBR Authorization
Remote reservoir parts washer and associated solvent handling	§106.454
Diesel storage tank and piping supporting the firewater pump	§106.472
engine	
Miscellaneous hydraulic oil storage and handling operations	§106.472
Miscellaneous transmission oil storage and handling operations	§106.472
Miscellaneous seal oil storage and handling operations	§106.472
Other miscellaneous lube oil storage and handling operations	§106.472
Miscellaneous used oil and grease storage and handling	§106.472
operations	
Oil/water separator	§106.532
Comfort heating systems	§106.102
Comfort air conditioning systems	§106.103
Bench-scale laboratory equipment used for chemical and	§106.122
physical analyses	
Food preparation activities	§106.242

### START-UP AND SHUTDOWN

18. This permit authorizes start-up and shutdown activities which comply with the emission limits in the maximum allowable emission rates table (MAERT). The holder of this permit shall operate the combustion turbines and associated air pollution control equipment in accordance with good air pollution control practice to minimize emissions during start-up and shutdown by operating in accordance with a written start-up and shutdown plan procedures specified by the equipment manufacturer. (09/09)

Dated September 8, 2009

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### Permit Numbers 37613 and PSDTX900

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA							
Emission	Source Name (2)	Air Contaminant Name (3)	Emission Rates *				
Point No. (1)			lb/hr	TPY**			
1	Unit 1 GE Frame FACombustionTurbine /HRSG Stack (Normal Operation)	NO <sub>x</sub> CO VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	106.1 51.5 0.6 23.11 27.06 3.31	430.1 206.9 2.4 83.2 19.57 2.4			
	Unit 1 GE Frame 7FACombustion Turbine/HRSG Stack (Startup/Shutdown/ Reduced Loads Operation)	NO <sub>x</sub> CO VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	650 2890 183 21.66 15.19 1.86	71.25 223.2 5.32 5.13 0.65 0.08			
2	Unit 2 GE Frame 7FA Combustion Turbine/HRSG Stack (Normal Operation)	NO <sub>x</sub> CO VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	106.1 51.5 0.6 23.11 27.06 3.31	430.1 206.9 2.4 83.2 19.57 2.4			
	Unit 2 GE Frame 7FA Combustion Turbine/HRSG Stack  (Start-up/Shutdown/ Reduced Loads Operation)	NO <sub>x</sub> CO VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	650 2890 183 21.66 15.19 1.86	71.25 223.2 5.32 5.13 0.65 0.08			

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA						
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *			
			lb/hr	TPY**		
3	Natural Gas Piping Fugitives for Units 1 & 2 (5)	VOC H <sub>2</sub> S	0.10 0.02	0.46 0.01		
4	Cooling Tower	PM/PM <sub>10</sub> HOCl HCl H <sub>2</sub> SO <sub>4</sub> H <sub>3</sub> PO <sub>4</sub> C <sub>6</sub> H <sub>4</sub> N <sub>3</sub> Na	2.04 0.04 0.03 <0.01 <0.01	8.94 0.19 0.13 <0.01 <0.01		
CTG1-OV	Unit 1 Combustion Turbine Lube Oil Tank, Unloading, and Piping	VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.09 0.09	0.40 0.40		
CTG2-OV	Unit 2 Combustion Turbine Lube Oil Vent, Unloading, and Piping	VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.09 0.09	0.40 0.40		
STG1-OV	Steam Turbine Lube Oil Vent, Unloading, and Piping	VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.09 0.09	0.40 0.40		
PUMP-DSL	Diesel Pump Engine Stack and Engine Lube Oil Crankcase	NO <sub>x</sub> CO VOC PM/PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	7.75 1.67 0.63 0.56 1.01 0.15	3.39 0.73 0.32 0.25 0.44 0.07		
CDTK-CT1	Unit 1 Natural Gas Condensate Tank	VOC H <sub>2</sub> S	<0.01 <0.01	0.02 <0.01		
CDTK-CT2	Unit 2 Natural Gas Condensate Tank	VOC H <sub>2</sub> S	<0.01 <0.01	0.02 <0.01		

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA							
Emission	Source	Air Contaminant Name (3)	Emission Rates *				
Point No. (1) Name (2)	Name (2)		lb/hr	TPY**			
SCVENT1	Hydrogen Scavenging Vent	VOC	<0.01	<0.01			
SCVENT2	Hydrogen Scavenging Vent	VOC	<0.01	<0.01			

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> total oxides of nitrogen
  - SO<sub>2</sub> sulfur dioxide
  - PM particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>
  - $PM_{10}$  particulate matter, suspended in the atmosphere, equal to or less than 10 microns in diameter
  - PM<sub>2.5</sub> particulate matter, suspended in the atmosphere, equal to or less than 2.5 microns in diameter
  - CO carbon monoxide
  - H<sub>2</sub>SO<sub>4</sub> sulfuric acid
  - HOCl hypochlorous acid HCl - hydrochloric acid
  - HCl hydrochloric acid H<sub>2</sub>S - hydrogen sulfide
  - H<sub>3</sub>PO<sub>4</sub> phosphoric acid
  - C<sub>6</sub>H<sub>4</sub>N<sub>3</sub>Na benzotriazole
- (4) The PM includes condensibles (both front half and back half of the sample train).
- (5) Fugitive emissions are an estimate only, and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:
  - 24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year
- \*\* Compliance with annual emission limits is based on a rolling 12-month period.